McKinley Paper – Wisconsin, Combined Locks Mill
WPDES – WI-0000990
Report to summarize the October 30, 2023 Ground Calcium Carbonate Overflow to Storm Water Outlet
McKinley Paper Contact – Katie Byrum, 920-687-3633, kbyrum@mwpaper.com

10/30/2023 – A contractor was scheduled in to water blast and clean out a tank that contained solidified Ground Calcium Carbonate (OmyaFil-PT72%). The agitator on the tank had previously failed and the calcium carbonate particles had settled out of solution. We were not able to pump or use the product as normal in our paper making process; it had rocked up in the bottom of the tank.

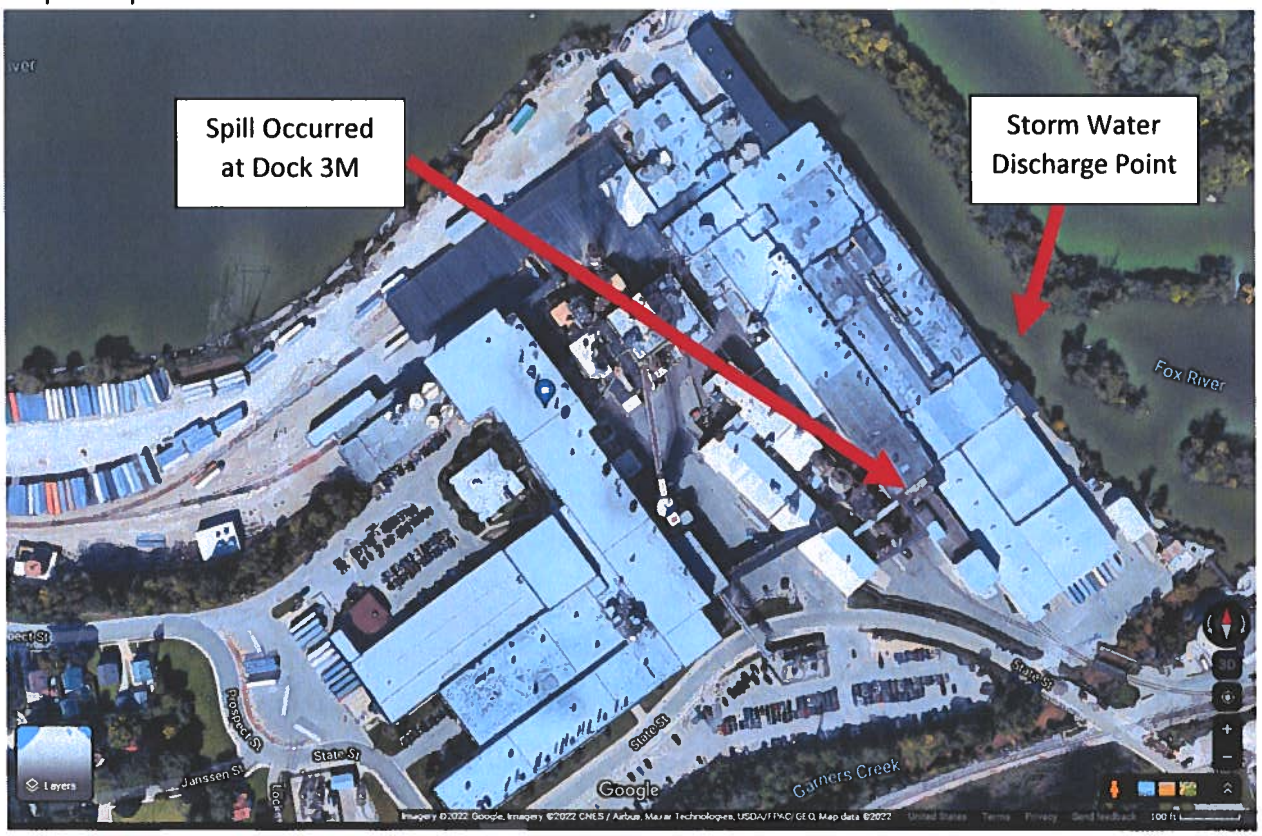
The contracted company had opened up tank drains and were breaking up the calcium carbonate then flushing it into mill floor drains. At one point, the contractor's employees walked away from the work area and floor drains plugged due to particles not staying in solution. All materials coming out of the tank drain and water hoses in use overwhelmed the floor u-drain system and spread across the floor of the coating kitchen tank area, into the hallways, into the basement of the mill, and out the exterior mandoor at Door 3M. There is a storm drain located at the bottom of the ramp at door 3M.

When the overflow was detected, a plug was installed at the storm water outlet by the mill's Emergency Response Team. The contractor involved dispatched one of their vacuum trucks to clean up the overflow. The calcium carbonate blocking the floor drain was unclogged and the water began draining down to wastewater treatment per design. Once clean up was complete, the plug was removed from the storm water outfall. Materials from the vacuum truck were emptied into the lift station and treated in our wastewater plant.

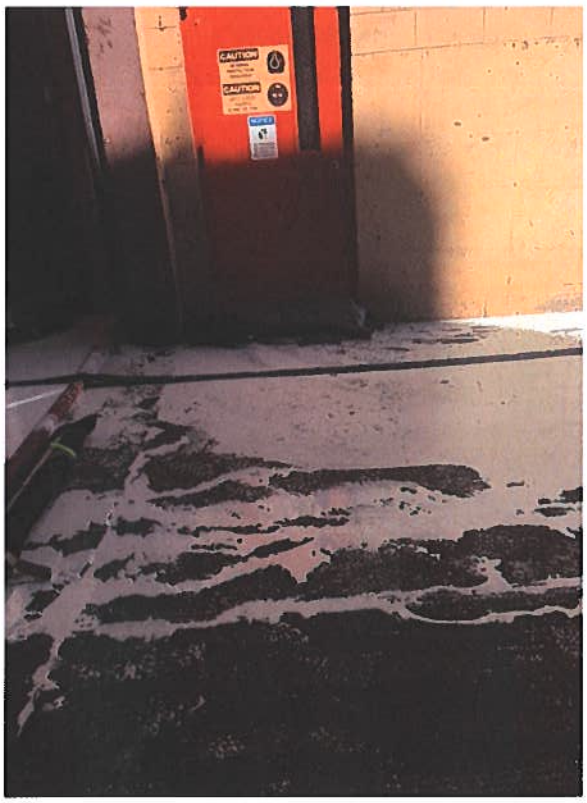
Conservative calculations indicate that up to 215 lbs of Ground Calcium Carbonate ($CaCO_3$) and 1.5 lbs of Silica (SiO_2) may have been released to the Fox River in approximately 1,000 gallons of wash water solution.

A full list of corrective actions is still being developed, and will be available at the request of the DNR.

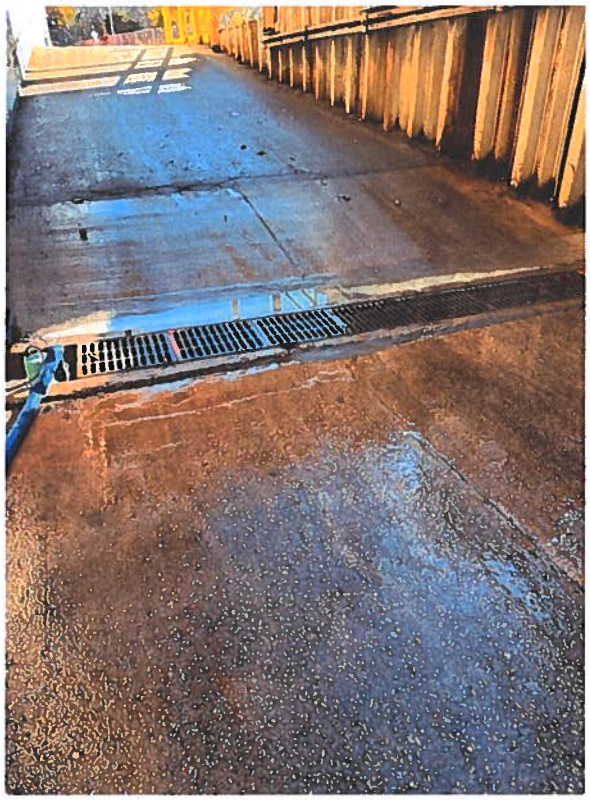
Maps and photos below.



Door 3M with the curb barrier and the mandoor on the other side of the overhead door and curb.



Door 3M storm drain after the stormwater outfall plug was installed and after cleaning.



Pictures of the interior of the mill. The first picture shows the inside of the orange mandoor at Door 3M. One to two inches of the GCC washwater is the milky white substance on the floor.

Attachments:
SDS for OmyaFil
Mill Spill Report
DNR Spill Hotline Report

SAFETY DATA SHEET

9885600 OMYAFIL-PT 72%

Version	Revision Date:	SDS Number:	Date of last issue: 05/31/2017
1.3 (GHS_US)	06/23/2020	PR98856-00	Date of first issue: 12/23/2014

SECTION 1. IDENTIFICATION

Product name : OMYAFIL-PT 72%
Product code : 9885600

Manufacturer or supplier's details

Company name of supplier : Omya Canada Inc.
Address : 18595 Highway #7 West
Perth ON K7H 3E4
Telephone : (613) 267-5367
Telefax : (613) 267-5408
Emergency telephone : (800) 424-9300

Recommended use of the chemical and restrictions on use

Recommended use : Filler or Pigment
Restrictions on use : For industrial use only.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Carcinogenicity (Inhalation) : Category 1A

GHS label elements

Hazard pictograms :

Signal Word : Danger

Hazard Statements : H350 May cause cancer by inhalation.

Precautionary Statements :

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

Additional Labeling

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 27.5456 %

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Typical composition (% w/w)
Ground calcium carbonate (GCC)	1317-65-3	>= 70 - < 90
quartz (SiO_2)	14808-60-7	0.6

SECTION 4. FIRST AID MEASURES

If inhaled : Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion.
If symptoms persist, call a physician.

In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.

In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.

If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed : None known.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Hazardous combustion products : No hazardous combustion products are known

Further information : Standard procedure for chemical fires.

Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Environmental precautions : No special environmental precautions required.

Methods and materials for containment and cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.
Advice on safe handling	:	For personal protection see section 8. No special handling advice required.
Conditions for safe storage	:	Keep container tightly closed in a dry and well-ventilated place.
Materials to avoid	:	Do not store near acids.
Further information on storage stability	:	No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Ground calcium carbonate (GCC)	1317-65-3	TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (Total dust)	15 mg/m3	OSHA P0
		TWA (respirable dust fraction)	5 mg/m3	OSHA P0
		TWA (Respirable)	5 mg/m3 (Calcium carbonate)	NIOSH REL
		TWA (total)	10 mg/m3 (Calcium carbonate)	NIOSH REL
quartz (SiO2)	14808-60-7	TWA (respirable)	10 mg/m3 / %SiO2+2	OSHA Z-3
		TWA (respirable)	250 mppcf / %SiO2+5	OSHA Z-3
		TWA (respirable dust fraction)	0.1 mg/m3	OSHA P0
		TWA (Respirable particulate matter)	0.025 mg/m3 (Silica)	ACGIH
		TWA (Respirable dust)	0.05 mg/m3 (Silica)	NIOSH REL

		TWA (Respirable dust)	0.05 mg/m3	OSHA Z-1
		PEL (respirable)	0.05 mg/m3	OSHA CARC

Personal protective equipment

Hand protection

Remarks	:	For prolonged or repeated contact use protective gloves.
Eye protection	:	Safety glasses
Skin and body protection	:	Protective suit
Hygiene measures	:	General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	suspension
Color	:	white
Odor	:	characteristic
pH	:	8.5 - 11 (20 °C / 20 °C) Concentration: 100 g/l Method: DIN-ISO 787/9
Melting point/freezing point	:	0 °C / 0 °C
Boiling point	:	ca. 100 °C / 100 °C Water
Flash point	:	Not applicable
Flammability (liquids)	:	Will not burn
Burning number	:	1
Upper explosion limit / Upper flammability limit	:	Not applicable
Lower explosion limit / Lower flammability limit	:	Not applicable
Vapor pressure	:	23.4 hPa (20 °C / 20 °C) aqueous phase
Density	:	1.8 - 2.1 g/cm3 (20 °C / 20 °C) Method: DIN-ISO 787/10 Density depends on the solids content of the dispersion.
Solubility(ies)		
Water solubility	:	0.014 g/l (20 °C / 20 °C)
		0.018 g/l (75 °C / 75 °C)

Partition coefficient: n-octanol/water	:	Not applicable
Decomposition temperature	:	> 400 °C / > 400 °C

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Stable under recommended storage conditions.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	Stable under recommended storage conditions. No decomposition if used as directed. Reacts with acids. It forms carbon dioxide (CO_2). This displaces the oxygen in the air in closed spaces. (danger of suffocation)
Conditions to avoid	:	No data available

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity : LD50 Oral (Rat): > 5,000 mg/kg

Components:

Ground calcium carbonate (GCC):

Acute oral toxicity : LD50 Oral (Rat): > 5,000 mg/kg

Respiratory or skin sensitization

Product:

No data available

Carcinogenicity

Components:

quartz (SiO_2):

Carcinogenicity - Assessment : Positive evidence from human epidemiological studies (inhalation)

IARC	Group 1: Carcinogenic to humans quartz (SiO_2) (Silica dust, crystalline)	14808-60-7
NTP	Known to be human carcinogen quartz (SiO_2) (Silica, Crystalline (Respirable Size))	14808-60-7

STOT-repeated exposure

Components:

quartz (SiO2):

Routes of exposure	:	Inhalation
Target Organs	:	Lungs
Assessment	:	May cause damage to organs through prolonged or repeated exposure.

Further information

Product:

This product contains prismatic tremolite (e.g., cleavage fragments) as an impurity. Sufficient exposure to respirable prismatic tremolite dust may cause serious lung problems.

No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): > 10,000 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 1,000 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	NOEC (Desmodesmus subspicatus (green algae)): 75 mg/l Exposure time: 72 h EC50 (Desmodesmus subspicatus (green algae)): 289 mg/l Exposure time: 72 h

Components:

Ground calcium carbonate (GCC):

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): > 10,000 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 1,000 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): > 200 mg/l Exposure time: 72 h

quartz (SiO2):

Toxicity to fish	:	No toxicity at the limit of solubility.

Toxicity to daphnia and other aquatic invertebrates	:	No toxicity at the limit of solubility.
Toxicity to algae/aquatic plants	:	No toxicity at the limit of solubility.
Toxicity to microorganisms	:	No toxicity at the limit of solubility.

Persistence and degradability

Product:

Biodegradability	:	Not applicable

Components:

quartz (SiO2):

Biodegradability	:	Result: Not biodegradable.
Biochemical Oxygen Demand (BOD)	:	Not applicable
Chemical Oxygen Demand (COD)	:	Not applicable

Bioaccumulative potential

Components:

Ground calcium carbonate (GCC):

Partition coefficient: n-octanol/water	:	Not applicable

quartz (SiO2):

Bioaccumulation	:	This substance is not considered to be persistent, bioaccumulating and toxic (PBT).
Partition coefficient: n-octanol/water	:	Not applicable

Mobility in soil

No data available

Other adverse effects

Product:

Ozone-Depletion Potential	:	Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
Additional ecological information	:	In solid state these minerals are a major part of the rocks of the earth's surface.

Components:

Ground calcium carbonate (GCC):

Results of PBT and vPvB assessment	:	Non-classified PBT substance Non-classified vPvB substance

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	:	Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging	:	Empty remaining contents. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION

International Regulations

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

Not applicable for product as supplied.

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	:	Acute/Chronic Health Hazard
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.
This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.
This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307
This product does not contain any priority pollutants related to the U.S. Clean Water Act

US State Regulations

Massachusetts Right To Know

Ground calcium carbonate (GCC)	1317-65-3
quartz (SiO2)	14808-60-7

Pennsylvania Right To Know

Ground calcium carbonate (GCC)	1317-65-3

Maine Chemicals of High Concern

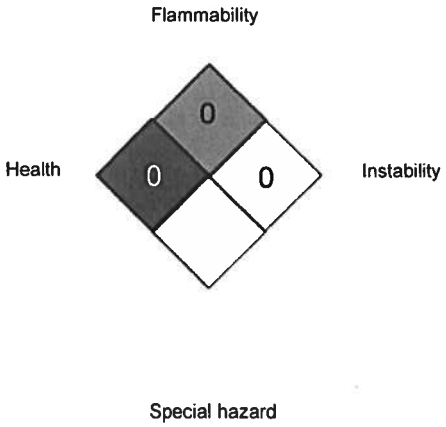
quartz (SiO2)	14808-60-7

The following chemicals are listed as Maine Chemicals of High Concern:

SECTION 16. OTHER INFORMATION

Further information

NFPA 704:



HMIS® IV:

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL	:	USA. NIOSH Recommended Exposure Limits

OSHA CARC	:	OSHA Specifically Regulated Chemicals/Carcinogens
OSHA P0	:	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
OSHA Z-3	:	USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts
ACGIH / TWA	:	8-hour, time-weighted average
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
OSHA CARC / PEL	:	Permissible exposure limit (PEL)
OSHA P0 / TWA	:	8-hour time weighted average
OSHA Z-1 / TWA	:	8-hour time weighted average
OSHA Z-3 / TWA	:	8-hour time weighted average

AICS - Australian Inventory of Chemical Substances; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

This material safety datasheet only contains information relating to safety and does not replace any product information or product specification.

Sources of key data used to compile the Material Safety	:	Information taken from reference works and the literature.

Data Sheet

Revision Date : 06/23/2020

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Responsible/issuing person : Omya Inc.
Regulatory Affairs Department
9987 Carver Road, Suite 300
Cincinnati, OH 45242

Reportable Spill Report Revision 7/2020

Date of spill 10/30/2023 Time of spill 12n Weather cool, clear

Department Coating Kitchen Location of spill Door 3M

Person reporting Brian Tierney Shift Coordinator Brian Tierney

Type of spill [Chemical] Oil Stock Water (circle)

Name of Material Spilled and Manufacturer Omya HydroCarb 60

Amt of material spilled total tank/tote volume lost
Amt of material recovered - Amount put into another container/containment

Amount of material released 560 [gallons / lbs (circle unit)

Where did the spill go? [Inside drain to Wastewater Tmt Plant] [Outside Storm Drain to river]
(circle answer) Inside held in Concrete/Containment [Outside held in Concrete/Containment]
Outside Dirt/Gravel

Notifications to X Waste Water Treatment (work with them to add defoamer, slow the discharge, etc)
✓ Environmental Manager - Katie Byrum 920-202-6336 cell
X Mill Emergency Response Team if needed for chemical cleanup

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To be completed by Environmental Manager

SDS listed ingredients Ground Calcium Carbonate 70-90%
Silica, crystalline (quartz) 0.3%
SARA 313, 304, 302, CERCLA materials with a RQ [None]

Suck Truck needed: [Yes] No

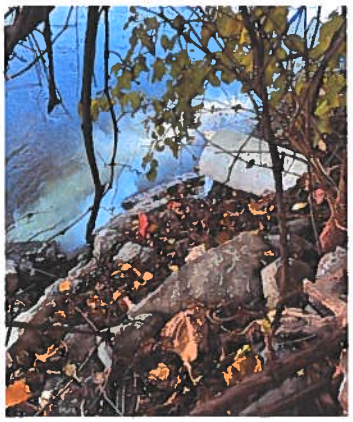
Authorities notified: X DNR/WI Emgcy Mgmt spill emergency 800-943-0003 10/30/23 4pm call
X DNR - waste water contact laura.gerold@wisconsin.gov copy of spill hotline report emailed to Laura
(if haz chem to river call) Coast Guard/National Response Center 800-424-8802
Notes on clean up:
H2O under pressure getting a suck truck and taking to lift station

Cause of Spill & Corrective Action:
Talked to April, she measured solids at <3% on what they tried to reconstitute. Use 5% for calcs.
4" line going about 200 ft to the river.
.33 x .33 x (pi) x 200 = ft^3 68.3892 ft^3 511.551 gal in pipe + < 50 gal to river when plug inserted = 560 gallons to river
Estimate ~1000 gallons of water to the river.
ERT attempted to flush water into the stormwater drain line to have it dilute the materials and flow back to be pumped out.
It did not work, so original amount of full pipe will be left in calculation. And additional volume added due to firehose flushing attempts.

Materials are dilute from original consistency. We were trying to clean out a tank as materials had settled and lots of water was added.
Assuming 5%consistency 4.5% $CaCO_3$ 212.436 lbs $CaCO_3$ April had tested consistency of GCC and it was less than 3%
of SDS sheet 0.03% SiO_2 1.41624 lbs SiO_2 Using 5% for calculations if any additional materials was loosend up and in solution

specific density of water used as this was a <5% solution

picture of stormdrain. Assume 50 gallons to the river lost prior to inflatable plug inserted.



Installed barrier helped to keep liquid inside the mill. Water was also coming out a different door.

Picture of Coating Kitchen. $CaCO_3$ tank is at the far end of the picture on the left. Drains in the building plugged and overflowed into other rooms and out exterior doors.

Door at the bottom of the stairs is the door in pic #3 above. Storm Drain with socks plugging it.

Cleaned up storm drain outside door 3M

Byrum, Katie

From: stephen.lederer@wisconsin.gov
Sent: Monday, October 30, 2023 4:28 PM
To: Byrum, Katie
Subject: WI SPILL #19817 ID 20231030NE45-1 - CALCIUM CARBONATE (NON-FERTILIZER) [BASE]

SERTS ID:
20231030NE45-1

Reported:
10/30/2023 16:05

Occurred:
10/30/2023 12:00

Substance:
CALCIUM CARBONATE (NON-FERTILIZER) [BASE] Released Amt: 500 Gal Recovered Amt: UNKNOWN (AMOUNTS ARE OFTEN ESTIMATED)

Reported by:
KATIE BYRUM
ENVIRONMENTAL MANAGER
MCKINLEY PAPER
kbyrum@mwpaper.com
(920) 687-3633
Also RP Contact

Location:
NE REGION
OUTAGAMIE COUNTY
COMBINED LOCKS, VILLAGE OF
PAPERMILL
540 PROSPECT ST
OUTSIDE OF DOOR 3M. WENT FROM INSIDE THE BUILDING OUT INTO A STORM DRAIN.

Responsible Party:
MCKINLEY PAPER
540 PROSPECT ST
COMBINED LOCKS, WI 54113
(920) 687-3633

Cause:
HUMAN ERROR

Cause Description:
CONTRACTOR WAS WORKING ON PIPES AND PLUGGED A DRAIN CAUSING THE SUBSTANCE TO SPILL OUT.

Environmental Impact:

IT ENTERED A STORM DRAIN THAT RUNS TO THE FOX RIVER

Weather:
COLD

Cleanup:
USING A PORTABLE SUMP PUMP TO DIRECT IT TO INTERNAL BUILDING DRAINS. AN INFLATABLE PLUG WAS PUT INTO THE STORM DRAIN. ALSO HAVE A A VACUUM TRUCK ON SITE.

Notified CODY HEINZE by Phone

Submitted by:
STEPHEN LEDERER
(800) 943-0003
stephen.lederer@wisconsin.gov

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From:	Gerold, Laura A - DNR
To:	Corrigall, John; Byrum, Katie
Cc:	Schmitt Marquez, Heidi S - DNR; Garbe, Amy M - DNR; Heinze, Cody W - DNR
Subject:	McKinley Paper - Wisconsin (Appleton Property Ventures) Notice of Noncompliance for Spills and Discharges without a Permit on 12/21/2022, 3/23/2023, 06/01/2023, 06/02/2023, 08/01/2023, 08/05/2023, 08/08/2023, 10/30/2023
Date:	Friday, November 3, 2023 11:03:25 AM
Attachments:	Appleton Property Ventures_Midwest Paper NON November 2023_Final.pdf image001.png image002.png image003.png image004.png image005.png

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Mr. Corrigall,

I have attached a PDF copy of a Notice of Noncompliance (NON) letter for the spills and discharges without a permit that occurred at the McKinley Paper - Wisconsin (Appleton Property Ventures, LLC) facility in Combined Locks on December 21, 2022, March 23, 2023, June 1, 2023, June 2, 2023, August 1, 2023, August 5, 2023, August 8, 2023, and October 30, 2023. There are follow-up items due on December 1, 2023 required which are detailed in the NON letter.

Please let me know if you have any questions.

Thank-you.

Laura

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Laura Gerold, PE
Pronouns: she/her/hers
Senior Wastewater Engineer – Bureau of Water Quality/Division of Environmental Management
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State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
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Tony Evers, Governor
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November 3, 2023

John Corrigall
Head of People, Legal, and Environmental Affairs
Authorized Representative
McKinley Paper-Wisconsin (formerly Appleton Property Ventures)
540 Prospect St.
Combined Locks, WI 54113-1120
//sent electronically//

Subject: **NOTICE OF NONCOMPLIANCE**
Appleton Property Ventures, LLC WI-0000990-09-0 (McKinley Paper-Wisconsin)
Permit Conditions – Wastewater Spills and Discharge without a Permit (12/21/2022, 03/23/2023, 06/01/2023, 06/02/2023, 08/01/2023, 08/05/2023, 08/08/2023, 10/30/2023)

Dear Mr. Corrigall:

The Wisconsin Pollution Discharge Elimination System (WPDES) authorized under s. 283.31, Wis. Stats., requires that Appleton Property Ventures, LLC (McKinley Paper-Wisconsin) issued WPDES permit # WI-0000990-09-0, a point source facility, meet permit limitations and conditions related to wastewater spills to waters of the state. The purpose of this letter is to issue a Notice of Noncompliance (NON) for a failure to comply with the above referenced permit. Specifically, Appleton Property Ventures, LLC (McKinley Paper-Wisconsin) has had eight wastewater spills that have reached the waters of the state in the past year.

Summary of Noncompliance for Wastewater Spills
s. 283.31(1), Wis. Stats., states that the discharge of any pollutant into any waters of the state or the disposal of sludge from a treatment work by any person is unlawful unless such discharge or disposal is done under a permit issued by the department under this section or s. 283.33. A permittee that holds a WPDES permit and discharges pollutants from a non-authorized outfall is considered in violation of their WPDES permit and the discharge is considered a discharge without a permit in violation of Chapter 283, Wis. Stats. The table below summarizes the violations related to the wastewater spills and discharges without a permit:

Violation Date	Overflow Amount	Violation Description
12/21/2022	5,000 gallons	Wastewater (Flush Water) Spill, Discharge without a permit
03/23/2023	500 gallons	Wastewater (Rinse Water) Spill, Discharge without a permit
06/01/2023	300 gallons	Wastewater (Process Water) Spill, Discharge without a permit
06/02/2023	200 gallons	Wastewater (Process Water) Spill, Discharge without a permit
08/01/2023	< 0.5 gallons	Wastewater (Zenix FP 5500) Spill, Discharge without a permit
08/05/2023	900 gallons	Wastewater (Thick Stock) Spill, Discharge without a permit
08/08/2023	6,500 gallons	Wastewater (Clean Water mixed with basement) Spill, Discharge without a permit
10/30/2023	500 gallons	Wastewater (Calcium Carbonate) Spill, Discharge without a permit

Attachment A provides a summary of the discharges/spills.

Section 6.2.1 of your WPDES permit requires the facility to report any noncompliance which may endanger health or the environment and Section 6.2.7 of your WPDES permit requires the facility to notify the Department if a spill or accidental release of any material or substance results in the discharge of pollutants to the waters of the state. This is also stated in s. NR 205.07 (3) (b), Wis. Adm. Code.

Katie Byrum of McKinley Paper (previously Appleton Property Ventures) notified the department of the spills immediately via email and phone calls to Laura Gerold, Compliance Engineer at the Department. Ms. Byrum also immediately reported the spills to the Wisconsin Spill Hotline. She also submitted great detailed written report summaries with pictures of the incidents to Laura Gerold. This meets the WPDES permit noncompliance reporting requirements in Section 6.2.1 and spill requirements in Section 6.2.7.

S. NR 205.07(1)(j), Wis. Adm. Code and Section 6.2.5 of your WPDES permit requires that at all times the permittee shall properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training as required in ch. NR 114, Wis. Adm. Code, and adequate laboratory and process controls, including appropriate quality assurance procedures. Facilities have not remained properly operated and maintained at all times which have led to unpermitted discharges to the waters of the state.

Required Actions

In response to this Notice, by December 1, 2023, McKinley Paper-Wisconsin (previously Appleton Property Ventures, LLC) shall submit the following information:

1. Update the Department on what long term plans the facility has developed to prevent reoccurrence of the spills. Also provide the full list of corrective actions that were referred to in the notice of noncompliance write-ups that were submitted to the department for each spill. Provide a map and a memo detailing what items were repaired or replaced onsite to prevent future spills.
    a. In particular, at least three spills were caused by disruption in power. Is there a plan for back-up power at the mill?
    b. Most spills take place at the truck loading dock area. Are there any improvements that can be made to decrease the chances of a spill?
    c. Many spills are caused by problems with a manual valve. Can the manual valves be automated?

2. A Standard Operation Procedure (SOP) for spills and unpermitted discharges shall be created and implemented to ensure proper operation and maintenance of the facility per Section 6.2.5 of your WPDES Permit. A copy of this SOP shall be submitted to the department. The SOP should include, but is not limited to the following information:

    a. Include a section on reporting to the Department in cases of spills and unpermitted discharges which includes calling the 24-Hour Spills Hotline as well as your wastewater compliance engineer as the facility currently does. This meets the reporting requirements in ss. NR 292.01 (2) and NR 205.07(1)(s), Wis. Adm. Code. Also include information on who gets notified at the plant, when does the fire department get called, who is on call to clean up spills that are going to the Fox River?

    b. Clarify that if a spill and/or unpermitted discharge at the facility were to occur again, samples would be taken at the facility of the fluid that was spilled and of the Fox River if the spill has or is suspected to have entered the river. The samples should be tested for the parameters required in

the WPDES permit. The sample results should be reported to your wastewater compliance engineer as soon as available.

c. In the case of spills and/or unpermitted discharges, the facility does submit documentation that includes pictures and maps. Additional pictures should be taken of any items that caused the spill (faulty valves, etc.). Pictures of the water body at the location where the spill entered (both upstream and downstream) should be taken.

d. River inspections should take place during and immediately after spills as well as downstream of the spill to determine if there were any impacts to the Fox River.

e. The SOP should be a working document and should be updated with lessons learned after each incident.

The Department will review these items for completion and approval. Failure to submit the required items may result in additional enforcement action. Thank you for your attention to this matter. If you have any questions, please contact me (Laura Gerold) at (920) 366-6728 or email at laura.gerold@wisconsin.gov.

Sincerely,

Laura A. Gerold

Laura Gerold, PE
Wastewater Engineer

cc: Katie Byrum – McKinley Paper
Amy Garbe - WDNR
Cody Heinze - WDNR
Heidi Schmitt Marquez – WDNR
Permit File

Attachment A – Summary of Discharges/Spills

The spill on December 21, 2022 was caused by a valve blockage that occurred when water was being flushed through the system after shutting down Paper Machine Number 7 before the Christmas holiday. When a manual valve did not fully close, flush water flooded a truck dock and went through storm drains to the Fox River. When this spill was discovered, the storm drains were covered. Flush water was pumped back to the mill and a Bobcat was used to scrape up any ice and bring it back to the wastewater treatment plant for treatment. It is estimated that 5000 gallons of flush water reached the storm drain, and 20 pounds of fiber was contained in it, although it could have ranged up to 11,000 gallons and 48 pounds of fiber.

On March 23, 2023, a manual valve was opened too aggressively to drain whitewater tower #1. A U-drain flooded and cascaded into a truck bay. The entire truck bay filled to approximately 1 foot. The valve was closed immediately when it started getting wet on the floor. The truck bay took about 20 minutes to drain completely and was kept isolated until the water receded back more than six feet from the overhead doors. Some water seeped under truck bay doors and man doors and went down the storm drain to the Fox River. Conservatively estimating quantities, up to 500 gallons is expected to have made it to the storm sewer at 0.0025% fiber and 2 ppm hypochlorite. Resulting in a maximum of 0.1 pounds of fiber and 0.008 pounds of sodium hypochlorite to the storm sewer. Hypochlorite was expected to have been completely consumed/off gassed prior to release to surface water.

On June 1, 2023, an excavator from a road construction that was occurring on Prospect Street next to the facility contacted a high voltage line resulting in a power outage across the entire facility. When the facility was being brought back online, excess water was created and filled up the truck dock area and overflowed out the doors into the nearby storm drains to the Fox River. When the spill was detected, the storm drains were covered. Most of the water remained in the truck dock area and drained back into the collection system. Water that ponded outside was pumped back into the building into the collection system. It is estimated that 300 gallons of water reached the storm drain and 1.251 pounds of fiber was contained in it.

On June 2, 2023, a valve was inadvertently left open and process water backed up, filled up the truck dock area, and overflowed out doors into the nearby storm drains to the Fox River. The facility was still experiencing problems after the power outage the previous day. When the spill was detected, the storm manholes were covered. After the manual valve for the truck dock area was discovered to be open and was closed the situation was resolved. Most of the water remained in place in the inside truck dock and was drained to the waste water collection system. It is estimated that 200 gallons of water reached the storm drains, and 0.834 pounds of fiber was contained in it.

The spill on August 1, 2023 was caused by human error. A worker moved a tote that had a slow leak outside near a storm drain. Approximately less than half a gallon of the chemical Zenix FP5500 is believed to have drained to a storm drain to the Fox River. When the day shift found this tote outside, it was moved to a more appropriate location. The tote was drained, cleaned out and this water was sent to the wastewater treatment plant. One-on-one training was implemented after this as well as a mill wide e-learning module.

On August 5, 2023, a manual valve on the discharge flow from Paper Machine Number Seven during start-up from scheduled maintenance was left in the closed position. This resulted in a thick stock overflow and the damage of equipment. Electrical circuits began to trip and because the stock could not be processed, another overflow occurred. At this time, one of the three sump pumps that would have sent water to the wastewater treatment plant were out of service. Only two pumps were running and were not able to handle the flow. The pump was repaired during this event and put back into service. Once the pump was put into a service, a crack was discovered in the piping of the surge tank. More stock spilled onto the already flooded floor. Paper Machine Number 7 was shut down. This stops the water cycle, but also created a sewer surge which caused another overflow. Due to the number of overflows, the stock was not able to be contained inside the facility and started to

leave the facility. The round storm drains were covered immediately, but the straight drain at the boiler house took longer to cover as it has an area larger than a standard spill mat. Stock did reach this drain that leads to the Fox River. The yard drain located next to the detention pond was promptly covered. Two vacuum trucks were used to clean up the discharge with 13,500 to 18,000 gallons recovered. It is estimated that up to 5% of the discharge was not recovered and reached the Fox River. This would include: up to 900 gallons of water, up to 226 lbs of paper fiber lost to sewer, and the highest volume paper additive was starch with up to 7 lbs of corn starch/BOD possibly present in the discharged water.

The spill on August 8, 2023 was caused when American Transmission Company had a problem at a substation in Forest Junction which caused a power outage at McKinley Paper – Wisconsin for a few minutes. The power outage caused all systems to shut down and need to be restarted sequentially. The basement of Paper Machine Number six flooded to approximately twelve inches deep. The water source was fresh water. The fresh water mixed with whatever debris was on the basement floor. A walk around the outside of the mill looking for discharges discovered flow at Stormwater Outfall #8. An inflatable plug was inserted into the outfall and chained into place. A vacuum truck was called in to clean the basement. The water from the vacuum truck was treated at the wastewater plant. Once the basement was cleaned, the drain plug was removed. It is estimated that approximately 6,500 gallons of the basement water may have been discharged to the Fox River via Outfall #8.

On October 30, 2023, a contractor was working onsite on pipes and plugged a drain, which caused approximately 500 gallons of calcium carbonate to spill, enter a storm drain, and discharge to the Fox River. A portable sump pump was used to direct the spill to internal drains to go to the wastewater treatment plan. An inflatable plug was put into the storm drain. A vacuum truck was brought onsite to clean up the spill.